

Mehdi Ahmadian

List of Publications by Year in descending order

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41
papers

1,581
citations

331670

21
h-index

414414

32
g-index

42
all docs

42
docs citations

42
times ranked

1071
citing authors

#	ARTICLE	IF	CITATIONS
1	Editorsâ€™ perspectives: road vehicle suspension design, dynamics, and control. <i>Vehicle System Dynamics</i> , 2011, 49, 3-28.	3.7	297
2	Modeling Multibody Systems with Uncertainties. Part I: Theoretical and Computational Aspects. <i>Multibody System Dynamics</i> , 2006, 15, 369-391.	2.7	144
3	Modeling multibody systems with uncertainties. Part II: Numerical applications. <i>Multibody System Dynamics</i> , 2006, 15, 241-262.	2.7	117
4	A survey of wheelâ€“rail contact models for rail vehicles. <i>Vehicle System Dynamics</i> , 2016, 54, 386-428.	3.7	110
5	Experimental analysis of magnetorheological dampers when subjected to impact and shock loading. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2008, 13, 1978-1985.	3.3	79
6	An Adaptive Semiactive Control Algorithm for Magnetorheological Suspension Systems. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2005, 127, 493-502.	1.6	74
7	On the Isolation Properties of Semiactive Dampers. <i>JVC/Journal of Vibration and Control</i> , 1999, 5, 217-232.	2.6	55
8	Optimal preview game theory approach to vehicle stability controller design. <i>Vehicle System Dynamics</i> , 2011, 49, 1967-1979.	3.7	54
9	Hopf Bifurcation and Hunting Behavior in a Rail Wheelset with Flange Contact. <i>Nonlinear Dynamics</i> , 1998, 15, 15-30.	5.2	51
10	Effect of System Nonlinearities on Locomotive Bogie Hunting Stability. <i>Vehicle System Dynamics</i> , 1998, 29, 365-384.	3.7	45
11	A Hybrid Control Policy for Semi-Active Vehicle Suspensions. <i>Shock and Vibration</i> , 2003, 10, 59-69.	0.6	45
12	An Analytical Study of Fire Out of Battery Using Magneto Rheological Dampers. <i>Shock and Vibration</i> , 2002, 9, 129-142.	0.6	31
13	A Temperature-based Controller for a Shape Memory Alloy Actuator. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2005, 127, 285-291.	1.6	31
14	Magneto-rheological suspensions for improving ground vehicleâ€™s ride comfort, stability, and handling. <i>Vehicle System Dynamics</i> , 2017, 55, 1618-1642.	3.7	30
15	Modeling of rolling contact fatigue in rails at the microstructural level. <i>Wear</i> , 2018, 406-407, 205-217.	3.1	30
16	Achieving anti-roll bar effect through air management in commercial vehicle pneumatic suspensions. <i>Vehicle System Dynamics</i> , 2019, 57, 1775-1794.	3.7	29
17	A review of vehicle active safety control methods: From antilock brakes to semiautonomy. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 1683-1712.	2.6	28
18	Failure mode and effects analysis of dual levelling valve airspring suspensions on truck dynamics. <i>Vehicle System Dynamics</i> , 2019, 57, 617-635.	3.7	27

#	ARTICLE	IF	CITATIONS
19	Analysis and Strategy for Superharmonics With Semiactive Suspension Control Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 795-803.	1.6	25
20	Pressure Distribution of a Multidisc Clutch Suffering Frictionally Induced Thermal Load. Tribology Transactions, 2016, 59, 983-992.	2.0	24
21	Integrated Vehicle Dynamics System through Coordinating Active Aerodynamics Control, Active Rear Steering, Torque Vectoring and Hydraulically Interconnected Suspension. International Journal of Automotive Technology, 2019, 20, 903-915.	1.4	23
22	Nonlinear Dynamical Analysis on Four Semi-Active Dynamic Vibration Absorbers with Time Delay. Shock and Vibration, 2013, 20, 649-663.	0.6	22
23	Qualitative Analysis of Magneto-Rheological Tuned Vibration Absorbers: Experimental Approach. Journal of Intelligent Material Systems and Structures, 2007, 18, 1137-1142.	2.5	19
24	Efficient empirical modelling of a high-performance shock absorber for vehicle dynamics studies. Vehicle System Dynamics, 2010, 48, 481-505.	3.7	19
25	Non-dimensionalised closed-form parametric analysis of semi-active vehicle suspensions using a quarter-car model. Vehicle System Dynamics, 2011, 49, 219-235.	3.7	15
26	A simulation-based comparative study on lateral characteristics of trucks with double and triple trailers. International Journal of Vehicle Safety, 2019, 11, 136.	0.2	13
27	An Experimental Evaluation of Smart Damping Materials for Reducing Structural Noise and Vibrations. Journal of Vibration and Acoustics, Transactions of the ASME, 2001, 123, 533-535.	1.6	11
28	Optimal VSC design based on Nash strategy for differential 2-player games. , 2009, , .		9
29	On the Application of Roller Rigs for Studying Rail Vehicle Systems. , 2013, , .		8
30	On Effective Electromagnetic Shielding of Modern Pulse Width Modulating Adjustable Speed Drives. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 875-884.	2.2	7
31	The Development of a Roller Rig for Experimental Evaluation of Contact Mechanics for Railway Vehicles. , 2015, , .		5
32	Coupled computational fluid and multi-body dynamics suspension boat modeling. JVC/Journal of Vibration and Control, 2018, 24, 4260-4281.	2.6	4
33	Numerical comparison of two methods for integration of active rear steering, torque vectoring and hydraulically interconnected suspension. International Journal of Vehicle Systems Modelling and Testing, 2018, 13, 125.	0.1	3
34	Evaluating the Effect of Natural Third Body Layers on Friction Using the Virginia Tech Roller Rig. , 2019, , .		2
35	Virginia Tech-Federal Railroad Administration Roller Rig Measurement Capabilities and Baseline Measurements. , 2019, , .		2
36	Wheel-Rail Contact Patch Geometry Measurement and Shape Analysis Under Various Loading Conditions. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
37	A Statistical Approach to Evaluating Wheel-Rail Contact Dynamics. , 2021, , .		1
38	Isolation Properties of Low-Profile Magnetorheological Fluid Mounts. Fluids, 2021, 6, 164.	1.7	1
39	A statistical evaluation of multiple regression models for contact dynamics in rail vehicles using roller rig data. International Journal of Rail Transportation, 2022, 10, 717-729.	2.7	1
40	Dynamic performance analysis of nonlinear tuned vibration absorbers. , 2006, , .		0
41	QUALITATIVE ANALYSIS OF MAGNETO-RHEOLOGICAL TUNED VIBRATION ABSORBERS: EXPERIMENTAL APPROACH. , 2007, , .		0